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POSTGRADUATE FACILITIES FOR INSURANCE PRACTITIONERS*
MINISTRY OF HEALTH'S NEW PROPOSALS

At the final session of the Annual Representative Meeting at Belfast, on Tuesday, July 20, a telegram was received from Sir George Chrystal announcing that the National Health Insurance Joint Committee, which met on the same day, had agreed to the proposed arrangements for the postgraduate education of insurance practitioners. The Minister of Health is now prepared to approve grants which will enable insurance practitioners to attend short courses of postgraduate study. Normally a course will consist of intensive study in general clinical subjects, and will occupy the practitioner's whole time for two weeks. Grants will be available to practitioners in urban districts as well as to those practising in rural districts, and will not be subject to any inquiry as to the practitioner's income. The grants hitherto available to practitioners working in rural districts will be continued for the remainder of the present year, after which they are to be merged in the general arrangements for all insurance practitioners.

Eligibility

In normal circumstances any insurance practitioner will be eligible for the grant provided that five years have elapsed since the date of his first registrable qualification, and that he has not less than 300 insured persons on his list. If in rural practice he must have not less than 150 insured persons on his list. No grant will be payable to a practitioner more than once in five years. The only postgraduate courses in respect of which grants will be payable are those approved by the Minister after consultation with an advisory committee consisting of representatives of the Insurance Acts Committee. The items which will be covered by the grant are as follows:

1. A fee for the course as fixed by the medical authorities, but not exceeding five guineas unless a higher fee is specially sanctioned by the Minister. The fee will normally be payable directly by the Minister to the medical authority providing the course.

2. Travelling expenses (third class railway fare or its equivalent).

3. Subsistence expenses incurred, not exceeding five pounds a week where attendance at the course necessitates the practitioner sleeping away from his residence, and not exceeding one pound a week in other cases.

4. A sum not exceeding eight guineas a week inclusive, in respect of the engagement, where necessary, of a whole-time locumtenent.

* Full details of the programme will be found in this week's *Journal* at p. 437.

Applications

Applications for grants are being invited through the Insurance Acts Committee of the British Medical Association and the local panel committees representing insurance practitioners in each area. An insurance practitioner seeking to avail himself of these facilities will obtain from the secretary of his panel committee a form of application, to be returned to the secretary after it has been duly completed. Panel committees will then consider such an application and, if they approve it, will forward it to the Secretary of the British Medical Association for submission to the Minister of Health. The Minister will notify the practitioner of the result of his application, and where the application is finally approved the practitioner will receive a voucher for production to the authority providing the postgraduate course.

This Year's Courses

For the present year the arrangements will probably be limited so far as England is concerned to courses to be held in September, October, and November at the British Postgraduate Medical School at Hammersmith, London, or at other institutions associated with it. It is anticipated that more general arrangements will be brought into operation early next year. Three courses, each lasting a fortnight, will be held, the first beginning on September 20, the second on October 18, and the third on November 15. There will be thirteen vacancies in the September course, twenty in the October course, and twenty-five in the November course.

The Insurance Acts Committee would be grateful for the co-operation of panel committees in bringing the scheme generally to the notice of practitioners, and, as an urgent step, the September, October, and November courses should be brought to their notice, in order that applications for these may be immediately forthcoming.

A Circular Letter

A circular letter giving details of the courses at the British Postgraduate Medical School, and of the grants to be awarded, and the procedure to be adopted by those practitioners who wish to avail themselves of these facilities, has been prepared by the Secretary of the British Medical Association. Secretaries of panel committees, who may wish to send this letter to their constituent insurance practitioners, should apply to the Head Office of the Association for the necessary number of copies.

A STUDY ON THE VARIABILITY IN THE INCIDENCE OF RHEUMATIC HEART DISEASE WITHIN THE CITY OF BRISTOL

BY

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Introduction

It has long been recognized that acute rheumatism shows a very marked social and geographical incidence, and in an attempt to elucidate some of the factors responsible for this striking fact an inquiry into the "environment under which rheumatic heart disease arose" was conducted during the period October, 1927, to September, 1930, in Gloucestershire, Somersetshire, and Wiltshire. This area was chosen for several reasons, one being that it comprised rural and urban districts and a wide variety of geographical formations varying from the flat low-lying moors of Somerset to the heights of the Wiltshire Downs and the Cotswolds. In order to confine the investigation to genuine cases of acute rheumatism only those suffering from rheumatic heart disease were studied, this being considered the hall-mark of the disease known as acute rheumatism. Such heart disease was defined as:

1. Heart disease arising in connexion with rheumatism, chorea, or scarlet fever in a child between the ages of 5 and 14 inclusive.

2. Heart disease which, though not arising in connexion with rheumatism, chorea, or scarlet fever, is nevertheless rheumatic in type—that is, ventricular enlargement with mitral incompetence or acute pericarditis arising in a child between the ages of 5 and 14 inclusive.

Private practitioners were invited to notify all such cases, and the school medical officers did the same, all doubtful cases being examined by a panel of physicians. The results of this investigation were reported by Savage (1931), and Table I shows the findings in the various counties and towns.

TABLE I

Area	Number of Cases Reported			Estimated Population, 1929	Cases per 1,000	Estimated School Population	Cases per 1,000 of School Population
	School	Private	Total				
Bath ..	9	6	15	69,240	0.21	7,800	1.28
Bristol ..	417	337	754	391,300	1.90	54,673	7.72
Gloucestershire	55	34	89	329,346	0.27	53,501	1.03
Somerset ..	93	65	158	406,560	0.39	42,804	2.17
Wiltshire ..	63	23	86	308,950	0.27	44,398	1.5

These figures showed a very striking difference in the incidence of the disease in Bristol and in the surrounding counties. That this was not entirely due to the difference between rural and urban conditions was proved by the low incidence of the disease in Swindon and Bath (0.20 and 0.21 per 1,000 of the population respectively). A close study of the housing conditions showed that dampness of the house had very slight if any effect on the incidence of rheumatic heart disease. Defective light and sunlight and a low-lying site were present slightly more often in the rheumatic houses than in the controls. Finally, the rheumatic families were found to be overcrowded slightly more frequently than the controls (Bristol 3.5 per cent., Bath 6.7 per cent., Gloucestershire 3.7 per cent., Somersetshire 0.1 per cent., Wiltshire 10 per cent., and Swindon 21.1 per cent. The number of cases investigated in Swindon was perhaps too small to be of any significance.). It was concluded that the influence of the various factors studied was too slight to be of any serious importance in the aetiology of the disease.

A More Detailed Investigation for the City of Bristol

The very high incidence of the disease in Bristol revealed by this investigation prompted a further study of the distribution of the cases within the city itself. For this purpose a spot map of all the cases was prepared by the school medical department. This showed little except that the cases tended to occur for the most part in the more populous and poorer quarters of the city. The incidence of rheumatic heart disease in the city wards was next determined and the incidence per 100,000 of the population calculated for each ward. This showed (Table II) that there was a greater variation in the incidence of the disease within the city itself than between the city and the surrounding counties. The city wards are far from ideal units, varying as they do considerably in size, each ward also containing several very different types of dwelling. However, these were the only units on which any information as to the size of the population was available. For control purposes the incidence of scarlet fever was determined for each of these wards over the same period of time, and it was found that the differences between the wards were very much smaller than those for rheumatism. It was further shown that there was no parallel between the scarlet fever incidence and that of acute rheumatism. It is now well recognized that infection with a haemolytic streptococcus is a very important factor in the production of acute rheumatism and of rheumatic relapses, and it was felt that if the streptococcal infection was the all-important deciding factor then the incidence of scarlet fever should vary in much the same way as that of rheumatism. However, this was obviously not so, and the actual figures support the clinical impression that streptococcal sore throats are quite common in all parts of the city. All the other information with regard to the city wards that was available was studied, and it was found that there was no correlation between any of these facts and the incidence of rheumatic carditis with the exception of density of population expressed as persons per room.

A Statistical Examination of the Results

Table II shows the results for the twenty-three wards, giving population, density of persons per room, number of cases of rheumatic heart disease, and incidence per 100,000. It should be explained that the figures for population and density were estimated by simple proportion from the Census figures for 1921 and 1931. In addition the table shows the number of cases of scarlet fever occurring in each ward and the incidence per 10,000 population. The wards are arranged in ascending order of density of population.

The computations involved in the investigation of the relations revealed by Table II are presented below in some detail, as it was considered desirable that those who may wish to examine them critically should have sufficient data presented for this to be possible. The conclusions are, however, very simple; and it is of course quite unnecessary to follow the steps of the calculations in order to appreciate them. Nevertheless, the meaning of the important operations is explained, so that it is hoped that those who are unfamiliar with statistical methods will be able to follow the rationale of the procedure should they wish to do so.

The most important relation to investigate is that between the density of persons per room and the inci-

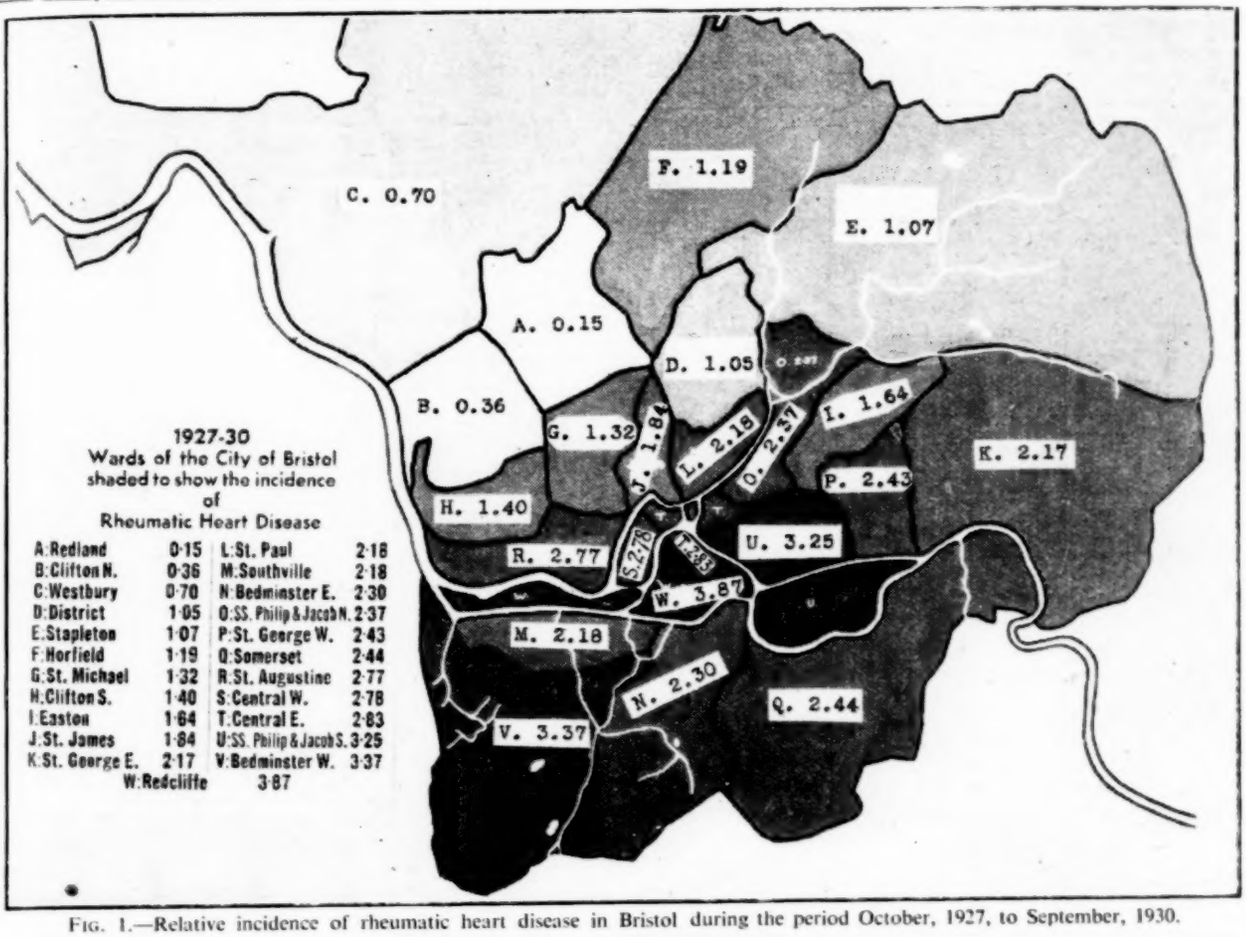

FIG. 1.—Relative incidence of rheumatic heart disease in Bristol during the period October, 1927, to September, 1930.

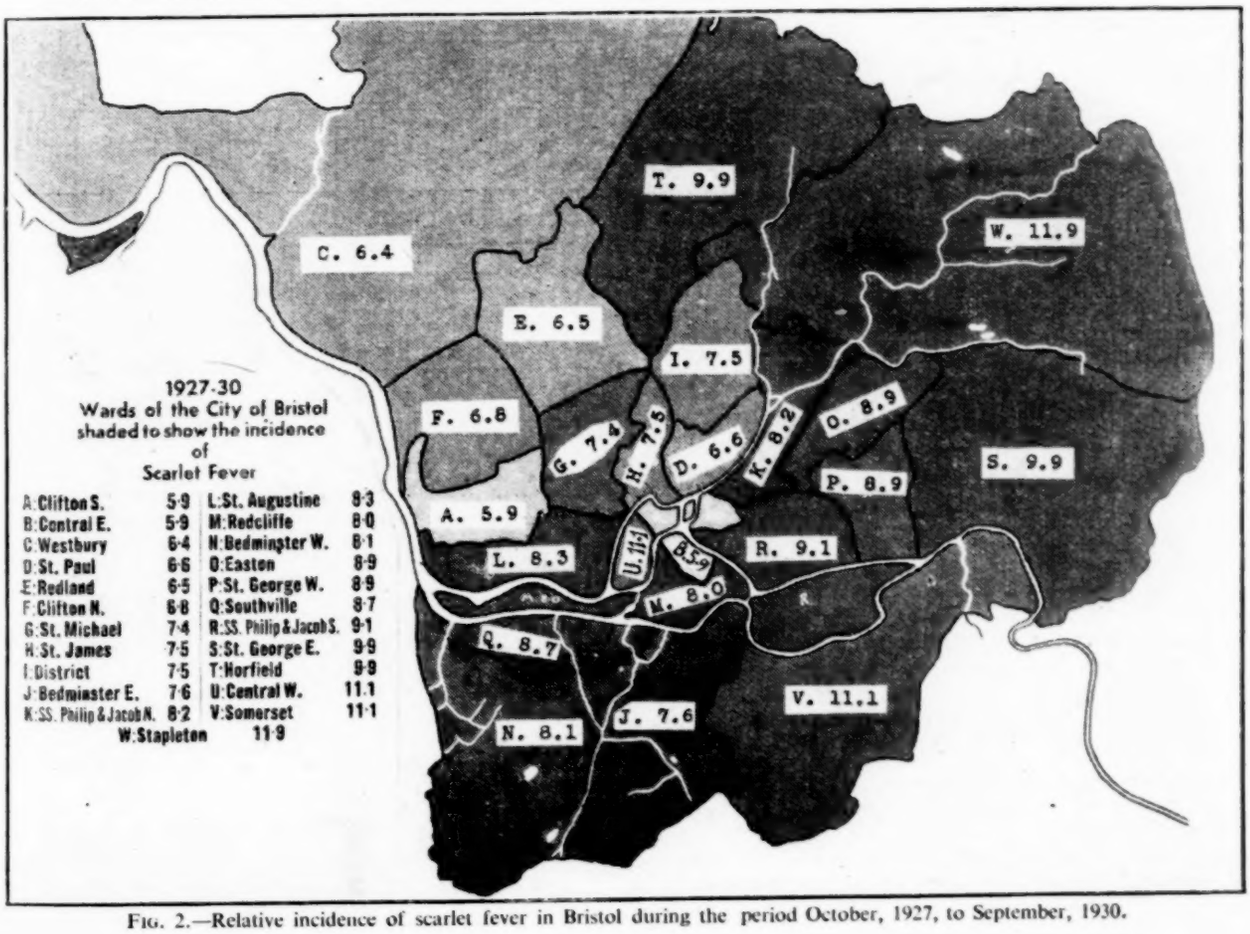

FIG. 2.—Relative incidence of scarlet fever in Bristol during the period October, 1927, to September, 1930.

TABLE II.—*Rheumatic Heart Disease and Scarlet Fever in the Twenty-three Bristol City Wards During the Three-Year Period 1927–30*

Population	Density of Persons per Room × 100	Rheumatic Heart Disease		Scarlet Fever	
		No. of Cases	Incidence per 100,000	No. of Cases	Incidence per 10,000
13,426	55	2	15	88	66
8,222	58	3	36	56	68
11,389	68	15	132	85	75
9,280	69	13	140	55	59
17,062	70	18	105	128	75
22,966	71	16	70	149	65
25,173	74	30	119	251	100
26,650	75	65	244	296	111
32,693	79	35	107	290	119
17,903	85	39	218	156	87
21,299	86	35	164	190	89
9,790	87	18	184	74	76
25,816	90	56	217	257	100
20,016	93	46	230	154	77
25,846	94	87	337	208	80
1,079	94	3	278	12	111
21,366	97	52	243	191	89
15,513	98	43	277	130	84
6,982	102	27	387	56	80
16,039	103	35	218	107	67
20,702	103	49	237	175	85
3,177	104	9	283	19	60
17,864	107	58	325	174	97
390,253	—	754	193	3,401	87

dence of rheumatic heart disease. The incidence in the various wards shows a certain variability, and this can be divided into two portions, the first being that part of the variability that is associated with the density of persons per room and the second part the remaining variability that might be presumed to exist among wards between which there was no difference in average density of population. It is clear that a comparison of these two portions will give a measure of the importance of the association for the wards of this particular city during the period under review.

The fundamental equation (or rather identity, for it is true for all values of the symbols) is as follows:

$$Sw(h-\bar{h})^2=Sw\left\{(h-\bar{h})-b(d-\bar{d})\right\}^2+\frac{S^2\{w(d-\bar{d})h\}}{Sw(d-\bar{d})^2}$$

w represents the number of rooms in a ward, d the density of persons per room, and h the incidence of rheumatic heart disease. The meaning of b (the regression coefficient) is explained later.

The first term is the sum of the squares of the deviations of incidences from the weighted mean incidence $\bar{h}$, each being multiplied by a figure proportional to the number of rooms in the ward: it is a measure of the variability between wards in the incidence of rheumatic heart disease. The third term is a measure of that part of the variability of incidences that may be regarded as dependent upon the density of persons per room and that would be eliminated if the density were fixed. The second term, therefore, is the variability that would still remain if the density of persons per room were constant.

The introduction of w, the number of rooms in a ward, is necessary because the wards are of very unequal size, and, of course, the evidence contributed by a large ward is of more value than that contributed by a small one. The figures are therefore weighted throughout by multiplying by numbers proportional to the number of rooms in the ward.

Precisely the same analysis applies to the two other investigations that are of importance—namely, the association between the incidence of scarlet fever and the density of persons per room; and, secondly, the association between the incidences of rheumatic fever and of scarlet fever.

Persons per Room and the Incidence of Rheumatic Heart Disease

Table III shows the results of the analysis of the three associations. Considering first the association between incidence of rheumatic heart disease and density of persons per room, the total variability between wards is the first term of the equation. The variability due to linear regression, the third term in the equation, is that portion of the variability due to the association with density of persons per room. The remainder, the second term in the equation, is the variability remaining at fixed density. The meaning of the term "degrees of freedom" may be indicated by a comparison. In the case of a total we divide by the number of observations in order to obtain the average. A figure representing variability may also be regarded as the sum of a number of "observations." In comparing variabilities, therefore, each is first divided by an appropriate number, called the degree of freedom, and the mean square deviation, or variance, is thus obtained.

TABLE III

(a) Regression of Incidence of Rheumatic Heart Disease on Density of Persons per Room

Regression coefficient = 5.52860 ± 0.77377.
Correlation coefficient = 0.8417

Variation in Incidence due to	Degrees of Freedom	Sum of Squares	Mean Square
Linear regression	1	132591	132591
Remainder	21	54541	2597
Total	22	187132	—

(b) Regression of Incidence of Scarlet Fever on Density of Persons per Room

Regression coefficient = 0.16963 ± 0.26567
Correlation coefficient = 0.1380

Variation in Incidence due to	Degrees of Freedom	Sum of Squares	Mean Square
Linear regression	1	125	125
Remainder	21	6429	306
Total	22	6554	—

(c) Regression of Incidence of Rheumatic Heart Disease on Incidence of Scarlet Fever

Regression coefficient = 1.01795 ± 1.14465
Correlation coefficient = 0.1905

Variation in Incidence of Rheumatic Heart Disease due to	Degrees of Freedom	Sum of Squares	Mean Square
Linear regression	1	6792	6792
Remainder	21	180340	8588
Total	22	187132	—

In the case of the association between the incidence of rheumatic heart disease and the density of persons per room, we see from Table III that the equation becomes

$$187132 = 54541 + 132591$$

$132591 \div 187132 = 0.71$, so that we can say that no less than 71 per cent. of the total variability in incidence is accounted for by the association with density of persons per room. In the city of Bristol, therefore, if the mean density per ward could be fixed we should expect the variability in incidence between wards to be reduced to rather less than one-third of its former value.

The association is highly significant. This can be tested by comparing the values given for the mean squares in the table, the mean squares being simply the second and third terms of the equation, each divided by the appropriate number of degrees of freedom. Half the difference between the natural logarithms gives "z," and reference to the table of z in Fisher's *Statistical Methods* (1934) shows that a difference of this size would be expected by chance far less often than once in a hundred trials.

The regression coefficient (b in the equation) measures the rate of increase of incidence as density rises. $b = 5.5$; so we may say, in more convenient units, that on the average the incidence of rheumatic heart disease rises by 55 per 100,000 for each increase of 0.1 in the density of persons per room. b is 7.1 times its standard error, and thus differs very significantly from zero. This is another way of arriving at the result given in the last paragraph.

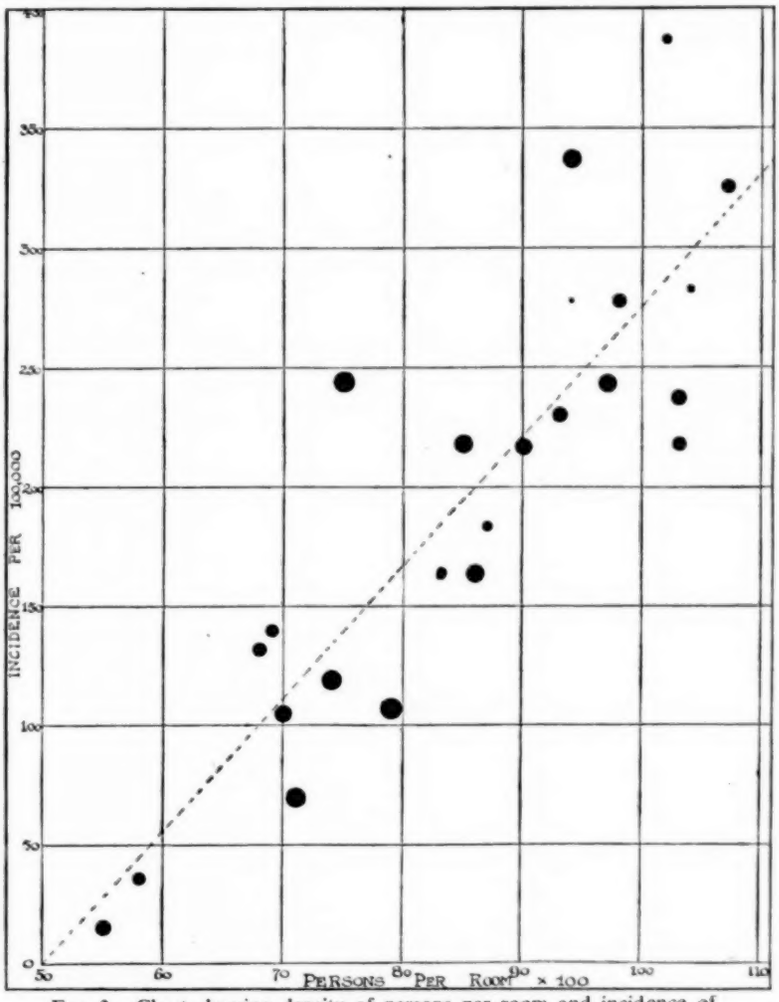

FIG. 3.—Chart showing density of persons per room and incidence of rheumatic heart disease.

It is possible to go further than the statement that the association is highly significant. We can estimate the likelihood (fiducial probability) that the magnitude of the association is not less than certain predetermined amounts. From the values given in Table III the chance is one in twenty that less than 48 per cent. of the total variability in incidence is accounted for by the association with density, and only one in a hundred that it is less than 37 per cent.

Fig. 3 gives a graphic representation of the association, and the regression line is also shown. The size of the circles is proportional to the number of rooms in each ward.

The regression line is the best fitting straight line, and, as has been pointed out above, 71 per cent. of the variability in incidence is thus accounted for. It may be asked, however, whether a more complex curve might not fit the data better and show an increased association between the two variables. It was immediately clear, by inspection, that a logarithmic curve would not secure an improved fit, but it seemed worth while finding whether the introduction of higher powers of the density might not do so. Introducing the square of the density as a second independent variant the multiple regression expression gave no significant improvement in fit. Thus there seems to be no reason for supposing that a straight line does not adequately represent the association of the variables. This is an important conclusion, for it indicates that the relation is of the simplest description. On the average the incidence of rheumatic heart disease per ward rises steadily in a linear manner as the density of persons per room increases.

Persons per Room and the Incidence of Scarlet Fever

The second part of Table III shows the association between the incidence of scarlet fever and the density of persons per room. There is no significant association at all. The equation is

$$6554 = 6429 + 125$$

Dividing the remainder, the second term, by 21, the available degrees of freedom, the mean square is seen to be 306. This actually exceeds the figure representing the association, which is only 125. The lack of significant association is indicated in another way, for the regression coefficient is smaller than its standard error. It is clear, therefore, that the variability between wards in the incidence of scarlet fever is not associated with the density of persons per room.

It will be noted that Table II shows that the variability in the incidence of scarlet fever is much less than in the case of rheumatic heart disease, but there are, however, quite considerable differences between wards. It is of some interest, therefore, to ask a further question. Does the figure for the whole city represent a uniform incidence, the differences between the wards being only chance fluctuations? This question may be answered by applying a test of homogeneity.

Using the figures given in Table II for the number of cases of scarlet fever in each ward and for the estimated population of the ward, a $2 \times n$ comparison gives

$$\chi^2 = 122.801$$

There are twenty-two available degrees of freedom, so the likelihood that the differences between wards are due to chance fluctuations is much less than one in a hundred. The difference between wards is therefore too great to be ascribed to chance, although, as already pointed

out, none of it is accounted for by association with density. The map showing the distribution of incidences of scarlet fever suggests another explanation. During so short a period as three years it is to be expected that epidemics will occur unequally in different portions of the city, and so some wards will be more affected than others. The map does appear to indicate that there is a tendency for adjacent wards to show similar incidences.

The Incidence of Rheumatic Heart Disease and the Incidence of Scarlet Fever

The third portion of Table III may be briefly dismissed. There is no significant association between the incidence of rheumatic heart disease and that of scarlet fever. The equation is

$$187132 = 180340 + 6792$$

Dividing the remainder by the twenty-one degrees of freedom, we obtain 8588, which is larger than the figure representing the association. The regression coefficient is again less than its standard error.

Discussion

It may be concluded that there is a significant and large association between the proportion of cases of rheumatic heart disease occurring in a ward during this three-year period and the density of persons per room in the ward. On the other hand, the occurrence of cases of scarlet fever during the same period shows no such association. The control finding makes it possible to dismiss at once one factor that otherwise might have been held to be affecting the rheumatism figures. There is no doubt that the age distribution of the population differs in the different wards, and that the poorer ones with higher densities of population have a higher proportion of children, and thus of persons of susceptible age. If this factor were of importance, however, it should have an influence on the scarlet fever figures also, so it may be concluded that the effect of this factor is at best slight—too slight to make any significant impression on the results.

Density of persons per room is obviously an expression of many other things besides overcrowding—for instance, it must be a fairly accurate index of the degree of poverty. It is interesting to note, however, that Dudley (1926) showed that, on a training-ship, pneumonia, sore throats, and acute rheumatism were all greatly increased with overcrowded sleeping quarters. With regard to poverty and all that it stands for, Glover (1930) is of the opinion that the incidence of acute rheumatism is directly related to poverty and bad housing. On the other hand the investigation into social conditions and acute rheumatism conducted by the Child Life Committee of the Medical Research Council (1927) has been held to show that the incidence of rheumatism is greatest not among the very poor and destitute but among the artisan class. This study also showed that there was no evidence for overcrowding as an aetiological factor in rheumatic carditis, but it must be remembered that the control families were all drawn from hospital patients, among whom acute rheumatism was likely to occur.

With regard to the present investigation caution is necessary in interpreting the findings given above. In the first place there is no indication that it is the physical factor of overcrowding that is responsible for increased incidence. As has been pointed out, overcrowding in a ward is obviously associated with many other social factors —undernutrition, poor clothing, crowded sleeping quarters, etc.—and it would be perfectly open to anyone to argue that it might be any or several of these other factors that stand in causal relation to the incidence of rheumatic heart disease. It might even be argued that the persons tending to live in overcrowded wards were those with an inherited or acquired susceptibility to acute rheumatism, though the well-known fact that acute rheumatism is rare under institutional conditions of various kinds makes such a hypothesis very unlikely as a complete explanation.

More broadly, it is impossible to argue from observed associations to actual causation. The results of this investigation show no less and no more than has already been stated—namely, that in a given city (with a high incidence of rheumatic heart disease), during a given period, the proportion of cases occurring in different wards showed a close association with the average number of persons per room in those wards, and that control observations on scarlet fever showed no significant association. For instance, it could not be deduced from these results that a similar association would necessarily be found in other areas; nor that the association would be found if the total incidence were much lower; nor that a substantial improvement in social conditions would greatly reduce the incidence of the disease. These and other hypotheses might be legitimate speculations, and might be regarded as likely to be true (especially the last), but they are uncertain inferences that require the introduction of assumptions in addition to a knowledge of the mere observed association. As in all other cases, an observed association is the starting-point and not the end of research; and it is to be hoped that researches designed to investigate such relations as that revealed in this paper may be fruitful in elucidating the aetiology of rheumatic heart disease and in discovering means for its prevention.

Summary

1. In 1931 a report was published on the incidence of rheumatic heart disease in childhood in Gloucestershire, Somersetshire, and Wiltshire. A more detailed analysis is now presented of the figures for the city of Bristol.

2. There was a large and highly significant association between the density of persons per room in the various city wards and the incidence of rheumatic heart disease in these wards. The correlation coefficient was 0.84.

3. A control investigation of the incidence of scarlet fever showed no such association; neither was there any significant correlation between the incidences of rheumatic heart disease and of scarlet fever.

Acknowledgements

Invaluable assistance in compiling these figures has been given by the school medical department of the city of Bristol, and we wish particularly to thank Mr. A. C. J. Gregory, the chief clerk, for his great help.

We are indebted also to Professor R. A. Fisher, who kindly gave us the basic identity, including weighting, for the analysis of variance used in this paper.

REFERENCES

Dudley, S. F. (1926). "The Spread of 'Droplet Infection' in Semi-isolated Communities." Med. Res. Coun. Rep. 111.

Fisher, R. A. (1934). *Statistical Methods for Research Workers.* Fifth edition. Oliver and Boyd, Edinburgh.

—— (1935). *The Design of Experiments.* Oliver and Boyd, Edinburgh.

Glover, J. A. (1930). *Lancet*, **1**, 499.

Savage, W. G. (1931). *British Medical Journal Supplement*, **2**, 37.

"Social Conditions and Acute Rheumatism" (1927). Med. Res. Coun. Rep. 114.

DENTAL BENEFIT

As the result of inquiries, held in the manner prescribed in Part VI of the National Health Insurance (Dental Benefit) Regulations, 1935, the Minister of Health has decided that Mr. Albert Stanworth of Towyn, Merioneth (formerly of Burnley), and Mr. Walter Cousins Watson of Melbourne, Derbyshire, are to be regarded as unsuitable for service in connexion with dental benefit under the National Health Insurance Act, 1936.

British Medical Association
COUNCIL AND COMMITTEES FOR 1937-8

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Northern Ireland:

Mr. John Armstrong, Ballymena.

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Colonel A. H. Proctor, London (*Grouped Indian Branches*).
Dr. G. C. Trotter, London (*New Zealand and Fiji Branches*).
Professor R. J. A. Berry, Westbury-on-Trym (*New South Wales and Queensland Branches*).
Dr. W. Watkins-Pitchford, Bridgnorth (*Branches in Union of South Africa*).
Mr. J. L. Gilks, Petersfield (*Northern Africa, etc., Branches*).
Mr. P. L. Giuseppi, Felixstowe (*West Indian Branches*).
Dr. G. Waugh Scott, Malvern Links (*Hong Kong and China, and Malaya Branches*).
Dr. J. P. Shanley, Dublin (*Branches in Irish Free State*).

ELEVEN ELECTED BY GROUPED REPRESENTATIVES

England and Wales:

Dr. C. E. S. Flemming, Bradford-on-Avon.
Dr. F. W. Goodbody, London.
Dr. P. Macdonald, York.
Mr. R. L. Newell, Cheadle.
Mr. L. A. Parry, Hove.
Dr. W. Paterson, Willesden.
Dr. H. W. Pooler, Ashover.
Dr. E. H. Snell, Coventry.

Scotland:

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With power to co-opt not more than two.

PUBLIC HEALTH NOTES

Ear Defects in School Children

At most school medical inspections the arrangements for testing defects of hearing are limited to the whispering test and for the testing of defects of the ear to a superficial examination of that organ. A number of authorities now carry out mass testing of hearing by means of the audiometer. Dr. Thomas Orr, medical officer of health and school medical officer of the borough of Ealing, in his annual report for the year 1936, expresses his opinion that by the usual practice of routine medical inspection a large number of ear defects are not detected. On the other hand, by the use of the audiometer valuable data can be obtained, though its regular application to all school children is laborious and expensive. Moreover, its usefulness is limited to the detection of ear diseases in which defects of hearing are present, and cases of ear disease not associated with deafness are liable to go undetected. For this reason he arranged for examinations by means of an electric auriscope at all routine medical inspections. Those children showing signs of ear disease were then referred to the ear clinic for treatment and for further investigation of their hearing. The most common finding was the presence of wax, which is considered an abnormality only when present in such amount as to prevent a sufficient view of the tympanic membrane. Such cases were referred to the inspection clinic for removal of the wax by syringing; if this failed the child was referred to the ear clinic. Of the other conditions found in nearly 6,000 children otorrhoea was present in sixteen, earache in two, and aural polypus in one. Dr. Orr considers that "the fact that 2.28 per cent. of the children examined suffered from an ear defect which in most cases would have remained undetected without an auriscopic examination has justified the additional feature in the medical inspection, particularly as the time involved in carrying out the inspection has not been materially increased."

A special ear clinic is held weekly for the inspection and treatment of ear disease in children of school age, and children attending the welfare centres. Most of the work entailed is in the treatment of chronic otitis media. Children who attend the ordinary centres daily for treatment are examined here weekly, and in selected cases zinc ionization is carried out, this form of treatment being limited to those cases which fail to respond to more conservative treatment and in which no contraindications to this form of therapy are present. No case is finally discharged until repeated examination, over a minimum period of six months, has shown no recurrence of the disease, the standard of cure being that the ear has been dry for this period and that there is no impairment of hearing. Of the 154 children referred to the ear clinic seventy-eight were suffering from chronic otitis media, twenty-seven from acute otitis media, fifteen from the presence of wax, eighteen from catarrhal deafness, and seven from furunculosis. Of the seventy-eight cases of chronic otitis media fifty-seven were successfully treated, a figure which is the more gratifying in that in many of these children the disease had been present for a number of years.

According to a statement in the Press, Mr. Savage, the Prime Minister of New Zealand, has announced that legislation dealing on a national basis with superannuation and health insurance will be introduced in Parliament during the session beginning in January.

THE INSURANCE MEDICAL SERVICE WEEK BY WEEK

Certificates Issued for Private Purposes

A practitioner had been informed by the Department that there was no provision in the regulations which made it improper for an employer to inspect a medical certificate on the official national health insurance form in cases in which the certificate was submitted by an employee in support of absence from employment on account of sickness. Not being satisfied, the practitioner asked for a definition of the words "for national health insurance purposes only" which appear on the official forms, and inquired how it was possible for an insured person who sent her certificate to her employer to comply with the note at the foot of the certificate, which requires the insured person to complete the form and send it to her society on the day upon which it is received from the doctor. To this the Ministry replied as follows:

"With reference to your letter I am directed by the Minister of Health to say that while the object of the medical certificates issued by insurance practitioners under the medical certification rules is to furnish approved societies with information required in connexion with the administration of the benefits conferred by the National Health Insurance Act, and while, as is obvious from the footnote on the certificates, an insured person who does not forward such certificates to his approved society within the time stated thereby incurs the risk of loss of benefit, it would not appear to the Minister to be practicable, if reasonable, to prohibit an insured person to whom an insurance practitioner has issued a certificate of incapacity for the above purpose, in discharge of his obligation to do so under his terms of service, from showing that certificate to his employer, if he finds it convenient to do so, notwithstanding that the practitioner is under no obligation to supply a certificate for that express purpose."

Drugs and Appliances

Coffee Extract.—A doctor who had prescribed coffee extract as part of a prescription, upon being notified in the usual way that it was not a drug forming part of medical benefit, appealed to the local panel committee, which held a hearing in the case and gave the opinion that coffee extract could not be properly regarded as a drug forming part of medical benefit. The cost of this ingredient in twelve prescriptions—namely 3s. 8d.—has therefore been charged to the doctor concerned.

Chewing Gum.—A panel committee has resolved "that whilst the committee recognizes that the substance in question was properly prescribed for a therapeutic purpose, it cannot consider it to be a drug forming part of medical benefit under the regulations." The panel committee also forwarded a copy of a letter from the prescribing practitioner in which she stated that the chewing gum was prescribed not as a drug but rather as a mechanical device for the stimulation of physiological function.

Spinal Jackets.—The County of Forfar Insurance Committee has been informed by the Scottish Department of Health that, while spinal jackets are not specified as such in the second schedule to the medical benefit regulations, the Department takes the view that spinal jackets when required for the treatment of dislocations or diseases of the spine may properly be regarded as falling within the category of "splints" as specified in the schedule. It may be presumed that the Scottish Consolidated Regulations will bring the list of authorized appliances into line with the English list, which contains the following: "Spinal jackets when required for the

treatment of fractures, dislocations, or diseases of the spine." In this connexion we have been asked to point out that whereas on page 85 of the latest edition of *Medical Insurance Practice* spinal jackets are correctly described, on page 160, where a further reference to the matter is made concerning payment, the word "injuries" has been used inadvertently instead of the word "diseases." On the subject of spinal jacket refitting, the Minister of Health has stated that he is advised that the cost of refitting a spinal jacket may be regarded as forming a proper charge upon the funds available for defraying the cost of medical benefit provided that the appliance can be economically repaired.

RETIREMENT OF DR. MIDDLETON MARTIN

Dr. J. Middleton Martin retired from the post of county medical officer of health and school medical officer for Gloucestershire on August 18, after long and distinguished service. Dr. Middleton Martin has served the county for thirty-five years, and the public health committee of the county council has recorded its appreciation of his eminent services and his invaluable and untiring work in inaugurating and maintaining so efficiently the public health services of the county. He is succeeded by Dr. H. Kenneth Cowan.

LOCAL GOVERNMENT SUPERANNUATION ACT

The Ministry of Health has recently issued a circular (No. 1644, H.M. Stationery Office, price 1d.) drawing attention to the Local Government Superannuation Act, 1937. The Act requires provision to be made for the superannuation of all whole-time officers in the employment of county councils, county boroughs, metropolitan boroughs and county districts, and of the Common Council of the City of London, and also of joint boards and statutory joint committees of such councils (including a joint superannuation committee), assessment committees, and any other local authority which has adopted the Act of 1922. Provision for the superannuation of part-time officers, however, will remain discretionary. These statutory changes will not become operative until April 1, 1939, but it will be necessary for local authorities to take action in advance of that date for the purpose of bringing the Act into operation. The Act also requires those councils which, not having adopted the Act of 1922, maintain a superannuation fund under a local act to modify such Acts so as to secure among other things that all their whole-time officers shall come under a superannuation scheme, and to facilitate interchange of staff with other authorities, with preservation of accrued superannuation rights and necessary financial adjustments.

PUBLIC HEALTH APPOINTMENTS

The following changes have recently taken place in the Public Health Service Medical Staff:

Dr. P. J. Doody, assistant medical officer at Plaistow Fever Hospital, to be assistant medical officer of health and assistant schools medical officer for Luton.

Dr. Sarah C. B. Walker to be assistant medical officer of health for Doncaster.

Dr. D. S. Poole to be district medical officer for Hampton Wick District in succession to Dr. H. A. Gunther, who has retired. Dr. Poole has acted as deputy to Dr. Gunther since 1929.

Dr. A. T. Johns, medical officer of health for Banbury borough since 1911, is to retire at the end of September.

Dr. C. Parker Stewart is to retire from the office of medical officer of health for Perth.

Dr. L. W. Hignett, medical officer to Ruislip-Northwood Urban Council, has retired after a long term of service.

Dr. Irene E. Chandler, assistant medical officer of health for Finsbury, has resigned following her recent marriage to Dr. N. D. Dunscombe.

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Irish Free State Medical Union (I.M.A. and B.M.A.): 18, Kildare Street, Dublin. (Telegrams: Bacillus, Dublin. Tel.: 62550 Dublin.)

Diary of Central Meetings

SEPTEMBER

1 Wed. Parliamentary Elections Committee, 2.30 p.m.

9 Thurs. Insurance Acts Committee, Prescribing Subcommittee, 11.30 a.m.
Insurance Acts Committee, Rural Practitioners Subcommittee, 2.30 p.m.

22 Wed. Committee on Organization of the Medical Profession in India, 11.15 a.m.
Council, 2 p.m.

OCTOBER

8 Fri. Ophthalmic Committee, 2.15 p.m.

Branch and Division Meetings to be Held

METROPOLITAN COUNTIES BRANCH: SOUTH-WEST ESSEX DIVISION.—Thursday, September 2. Visit to Messrs. Cadbury's, Bournville.

POSTGRADUATE NEWS

The Fellowship of Medicine announces the following courses: physiology and anatomy and embryology, in preparation for the Primary F.R.C.S. examination, Mondays, Wednesdays, and Fridays at 5.30 p.m. and 8 p.m., September 1 to November 22. Courses suitable for M.R.C.P. and M.D. candidates will be held as follows: clinical and pathological at National Temperance Hospital, Tuesdays and Thursdays, 8 p.m., September 7 to 23; chest and heart diseases at Royal Chest Hospital, Mondays, Wednesdays, and Fridays, at 8 p.m., September 13 to October 2; chest diseases at Brompton Hospital, twice weekly, at 5 p.m., September 6 to October 2; neurology at West End Hospital for Nervous Diseases, September 20 to October 2; a course, suitable for D.C.H. candidates, at Infants Hospital, September 20 to 25; a two-day course in plastic surgery, September 15 and 16; proctology at Gordon Hospital, September 27 to October 2; ophthalmology at Royal Westminster Ophthalmic Hospital, September 25 and 26. Detailed syllabuses may be obtained from the Fellowship of Medicine, 1, Wimpole Street, W.1. Courses are open only to members of the Fellowship.

A special postgraduate course, open to all medical practitioners without fee, will be held at St. Mary's Hospital Medical School on Thursday, Friday, Saturday, and Sunday, September 30, October 1, 2, and 3.

Sir StClair Thomson will deliver the annual address on "Subglottic Intrinsic Cancer of the Larynx" at the Central London Throat, Nose and Ear Hospital, Gray's Inn Road, W.C., on Friday, October 8, at 4 p.m. The following courses will be held at the hospital during the winter session: September 6 to 10; October 11 to 15; November 29 to December 3; February 7 to 11; and April 4 to 8, methods of examination and diagnosis. October 4 to 16 and April 25 to May 7, anatomy and physiology for Part I of the D.L.O. examination. October 18 to 30 and May 9 to 21, clinical course for Part II of the D.L.O. examination, including peroral endoscopy class and pathology and bacteriology class. November 22 to 27 and March 14 to 19, general practitioners' week. Postgraduate lectures by members of the hospital staff will be given on Fridays at 4 p.m. from November 5 to April 8 (except December 24 and 31). Details will be published in the postgraduate diary column of the *Supplement* week by week.

WEEKLY POSTGRADUATE DIARY

BRITISH POSTGRADUATE MEDICAL SCHOOL, Ducane Road, W.—*Daily*, 10 a.m. to 4 p.m., Medical Clinics, Surgical Clinics and Operations, Obstetrical and Gynaecological Clinics and Operations. *Wed.*, 3 p.m., Clinical and Pathological Conference (Surgical). *Thurs.*, 3 p.m., Operative Obstetrics.

VACANCIES

ALBERT DOCK HOSPITAL, Connaught Road, E.—R.M.O. (male). Salary £110 p.a.

BARKING BOROUGH.—Assistant Dental S. Salary £450-£20-£550 p.a.

BARNSTAPLE: NORTH DEVON INFIRMARY.—Sole R.M.O. Salary £150 p.a.

BIRMINGHAM CITY.—Whole-time J.M.O. (male) at Dudley Road Hospital. Salary £200 p.a.

BIRMINGHAM: EAR AND THROAT HOSPITAL.—Non-resident Third H.S. Salary £150 p.a.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—H.S. Salary £100 p.a.

BLACKBURN COUNTY BOROUGH.—Whole-time R.J.A.M.O. (male) for Queen's Park Hospital and Institution. Salary £150-£200 p.a.

BLACKPOOL: VICTORIA HOSPITAL.—H.S. (male). Salary £200 p.a.

BOLINGBROKE HOSPITAL, S.W.—R.S.O. (male, unmarried). Salary £200 p.a.

BOLTON ROYAL INFIRMARY.—H.S. (female). Salary £150 p.a.

BOSTON: HOLLAND COUNTY COUNCIL.—Assistant M.O.H. Salary £600-£25-£700 p.a.

BRIGHTON: ROYAL SUSSEX COUNTY HOSPITAL.—H.S. (male, unmarried). Salary £150 p.a.

BRISTOL: COSSHAM MEMORIAL HOSPITAL.—J.R.M.O. (male). Salary £100 p.a.

BRITISH POSTGRADUATE MEDICAL SCHOOL, Ducane Road, W.—(1) Resident Anaesthetist. (2) C.O. Salaries £150 p.a. each.

BROMSGROVE: WORCESTERSHIRE MENTAL HOSPITAL.—Second A.M.O. (male, unmarried). Salary £350-£25-£450 p.a.

BURY INFIRMARY, Lancs.—(1) H.P. (2) Two H.S.s. Salaries £150 p.a. each. (3) C.O. (male). Salary £150 p.a.

CAMBRIDGE: ADDENBROOKE'S HOSPITAL.—(1) Whole-time Biochemist. Salary £600 p.a. (2) H.S. (male, unmarried). Salary £130 p.a.

CAITHNESS COUNTY COUNCIL.—Surgical Specialist. Salary £1,000 p.a.

CANTERBURY: NEW KENT AND CANTERBURY HOSPITAL.—H.S. (male) to Special Departments. Salary £125 p.a.

CARDIFF: PRINCE OF WALES'S ORTHOPAEDIC HOSPITAL.—H.S. (male, unmarried). Salary £200 p.a.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—(1) Pathologist. Honorarium £105 p.a. (2) Assistant S.

CENTRAL LONDON THROAT, NOSE AND EAR HOSPITAL, W.C.—Two Honorary Second Assistants for Out-patient Department.

COLCHESTER: ROYAL EASTERN COUNTIES INSTITUTION.—A.M.O. (male, unmarried). Salary £400 p.a.

CROYDON GENERAL HOSPITAL.—H.S. (male). Salary £125 p.a.

DENBIGH: NORTH WALES COUNTIES MENTAL HOSPITAL.—J.M.O. (male, unmarried). Salary £350-£25-£450 p.a.

DERBY: DERBYSHIRE HOSPITAL FOR WOMEN.—R.H.S. Salary £150 p.a.

DERBY: DERBYSHIRE ROYAL INFIRMARY.—H.P. (male, unmarried). Salary £150 p.a.

DERBYSHIRE EDUCATION COMMITTEE.—A.S.M.O. (male). Salary £500-£25-£700 p.a.

DREADNOUGHT HOSPITAL, Greenwich, S.E.—(1) H.S. (2) H.P. Males, unmarried. Salaries £110 p.a. each.

EAST SUFFOLK AND IPSWICH HOSPITAL.—H.S. (male) to Ear, Nose, and Throat S. and to an Assistant S. Salary £144 p.a.

EXETER: ROYAL DEVON AND EXETER HOSPITAL.—H.S. (male). Salary £150 p.a.

GODALMING: MEATH HOME OF COMFORT FOR EPILEPTIC WOMEN AND GIRLS.—Part-time M.O. Salary £100 p.a.

GRANTHAM HOSPITAL.—R.M.O. Salary £250 p.a.

GREAT YARMOUTH GENERAL HOSPITAL.—H.S. (male, unmarried). Salary £140 p.a.

HALIFAX: ROYAL HALIFAX INFIRMARY.—R.S.O. (male, unmarried). Salary £250 p.a.

HARTLEPOOLS HOSPITAL.—Senior H.S. (male). Salary £175 p.a.

HEMEL HEMPSTEAD: WEST HERTS HOSPITAL.—Senior R.M.O. (male). Salary £150 p.a.

HOUNSLOW HOSPITAL.—J.R.H.P. and C.O. (male). Salary £100 p.a.

LANCASHIRE COUNTY COUNCIL.—(1) J.A.M.O. (male, unmarried) for Wrightington Hospital, Appley Bridge. Salary £200 p.a. (2) J.H.S. (unmarried) for Biddulph Grange Orthopaedic Hospital. Salary £200 p.a.

LEEDS CITY.—A.M.O. for Maternity and Child Welfare. Salary £500-£25-£700 p.a.

LEICESTER CITY.—R.M.O. (male) for the City Isolation Hospital and Sanatorium. Salary £300 p.a.

LEICESTER: CITY MENTAL HOSPITAL, Humberstone.—H.P. (male, unmarried). Salary £300 p.a.

LEICESTER ROYAL INFIRMARY.—(1) Resident Anaesthetist. Salary £150-£250 p.a. (2) H.S. (3) Senior C.O. (4) Two H.P.s. Salaries £125 p.a. each. (5) J.C.O. Salary £100 p.a.

LONDON HOMOEOPATHIC HOSPITAL, W.C.—Gynaecological H.S. Salary £100 p.a.

MAIDSTONE: KENT COUNTY OPHTHALMIC AND AURAL HOSPITAL.—(1) Senior Ophthalmic H.S. (2) Junior Ophthalmic H.S. Unmarried. Salaries £250 and £200 p.a. respectively.

MANCHESTER CITY.—R.A.M.O. (male) for Booth Hall Hospital. Salary £200 p.a.

MANOR HOUSE HOSPITAL, N.W.—J.M.O. (male, unmarried). Salary £200 p.a.

MANSFIELD AND DISTRICT GENERAL HOSPITAL.—H.S. (male). Salary £150 p.a.

NEW ZEALAND: OTAGO HOSPITAL BOARD.—Senior R.M.O. (unmarried) for the University of Otago and Dunedin Hospital. Salary £500 p.a.

NOTTINGHAM CITY HEALTH DEPARTMENT.—Whole-time Assistant Tuberculosis Officer. Salary £500-£25-£700 p.a.

POOLE: CORNELIA AND EAST DORSET HOSPITAL.—H.P. (male, unmarried). Salary £150 p.a.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.—H.S. to the Eye, Ear, Nose, and Throat Department. Salary £150.

PRINCE OF WALES'S GENERAL HOSPITAL N.—(1) J.H.P. (2) Two J.H.S.s. Males, unmarried. Salaries £90 p.a. each.

PRINCESS ELIZABETH OF YORK HOSPITAL FOR CHILDREN, E.—H.P. Salary £125 p.a.

QUEEN'S HOSPITAL FOR CHILDREN, E.—(1) R.M.O. (2) H.P. (3) C.O. Salaries (1) £200 p.a., (2) and (3) £100 p.a. each.

READING: ROYAL BERKSHIRE HOSPITAL.—(1) R.M.O. for Blagrave Branch Hospital and Assistant to Pathologist. Male. Salary £150 p.a. (2) Students training for Diploma in Orthoptics.

ROTHERHAM HOSPITAL.—(1) H.S. for the Ophthalmic and Ear, Nose, and Throat Departments. (2) Senior H.S. (male). Salaries £150 p.a. and £200 p.a. respectively.

ROYAL CANCER HOSPITAL (FREE), S.W.—(1) Two Assistant Radiologists. Salaries £350 p.a. each. (2) H.S. Salary £100 p.a. (3) Whole-time Assistant Radium Therapist. Salary £500 p.a.

ROYAL FREE HOSPITAL, W.C.—R.C.O. (female). Salary £150 p.a.

RUNWELL HOSPITAL FOR NERVOUS AND MENTAL DISORDERS.—H.P. Salary £150 p.a.

ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, E.—Hon. Dermatologist in Charge of Skin Department.

ST. PETER'S HOSPITAL FOR STONE, ETC., W.C.—H.S. (male). Salary £75 p.a.

SALFORD ROYAL HOSPITAL.—(1) H.P. (2) Two H.S.s. (3) Casualty H.S. Males. Salaries £125 p.a. each.

SALVATION ARMY MOTHERS' HOSPITAL, E.—Senior R.M.O. (female). Salary £150 p.a.

SHEFFIELD CITY.—R.A.M.O. (female) for King Edward VII Hospital, Rivelin Valley Road. Salary £200 p.a.

SHEFFIELD: JESSOP HOSPITAL FOR WOMEN.—R.M.O. at Firth Auxiliary Hospital. Salary £150 p.a.

SHEFFIELD: ROYAL INFIRMARY.—Senior C.O. Salary £150 p.a.

SHEFFIELD UNIVERSITY: FACULTY OF MEDICINE.—Assistant Pathologist to the Royal Hospital, Sheffield, and Demonstrator of Pathology to the University. Salary £500 p.a.

SURREY COUNTY COUNCIL.—(1) Whole-time Resident Obstetrician for Surrey County Hospital, Kingston-on-Thames. Salary £725-£25-£825 p.a. (2) Whole-time Resident Obstetrician for Guildford. Salary £375 p.a. (3) Two A.M.O.s. Salaries £600-£20-£700 p.a. each.

WAKEFIELD CITY.—J.A.M.O. (male) for Public Health Department. Salary £500-£25-£700 p.a.

WALSALL GENERAL HOSPITAL.—H.S. Salary £150 p.a.

WEST BROMWICH COUNTY BOROUGH.—(1) H.P. and (2) H.S. for Hallam Hospital. Males. Salaries £200 p.a. each.

WEST RIDING OF YORKSHIRE MENTAL HOSPITALS BOARD.—(1) Medical Superintendent for Wakefield Mental Hospital. (2) Fifth A.M.O. for Menston Mental Hospital. Salaries £1,000-£50-£1,400 p.a. and £350-£25-£450 p.a. respectively.

WESTERN OPHTHALMIC HOSPITAL, N.W.—(1) Senior H.S. (2) J.H.S. Salaries £150 p.a. and £100 p.a. respectively.

WOLVERHAMPTON: ROYAL HOSPITAL.—H.P. (unmarried). Salary £125 p.a.

WOOLWICH AND DISTRICT WAR MEMORIAL HOSPITAL, S.E.—R.S.O. (male). Salary £175 p.a.

WORCESTERSHIRE COUNTY COUNCIL.—Whole-time Assistant Tuberculosis Officer (male). Salary £600-£25-£700 p.a.

CERTIFYING FACTORY SURGEONS.—The following vacant appointments are announced: Whitstable (Kent); Stokesley (Yorkshire, North Riding); Elland (Yorkshire, West Riding). Applications to the Chief Inspector of Factories, Home Office, Whitehall, S.W.1, by September 10.

To ensure notice in this column advertisements must be received not later than the first post on Tuesday mornings.

Notifications of offices vacant in universities, medical colleges, and of vacant resident and other appointments at hospitals, will be found at pages 32, 33, 34, 35, 36, 37, 38, 39, 42, and 43 of our advertisement columns, and advertisements as to partnerships, assistantships, and locumtenencies at pages 40 and 41.

APPOINTMENTS

WOLFE, H. R. I., F.R.C.S., Junior Assistant in the Surgical Unit, Welsh National School of Medicine, Cardiff.

CERTIFYING FACTORY SURGEONS.—M. MacCrimmon, M.B., Ch.B., for the West Drayton District (Middlesex); T. J. S. O'Neill, M.B., Ch.B., for the Shelf District (Yorkshire, West Riding).

BIRTHS, MARRIAGES, AND DEATHS

The charge for inserting announcements of Births, Marriages, and Deaths is 9s., which sum should be forwarded with the notice not later than the first post on Tuesday morning, in order to ensure insertion in the current issue.

BIRTH

HOUSDEN.—On August 23, 1937, at "The Chimes," 51, Longley Road, S.W.17, to Marjorie (née Buckle), wife of Edgar Gerard Housden, M.D.Lond., a daughter (Mary Isabel).